

**DEVELOPMENT OF HIERARCHICAL ESTIMATION METHOD
FOR ANTHROPOMETRIC VARIABLES USING GUI**

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“I declared that this thesis is the result of my own work except the ideas and summaries which I clarified their sources. The thesis has not been accepted for any degree and is not concurrently submitted in the candidature of any degree.”

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ABSTRACT

Anthropometry data of people have become an important need for ergonomic design. Estimation of the anthropometry variables can be made by proper regression model. This study focuses on development of hierarchical estimation method for anthropometry variables using graphical user interface (GUI). The hierarchical regression model is applied to 21 Anthropometry variables using the 1988 Anthropometric Survey of U.S. Army Personnel data. Results are illustrating in graphical user interface (GUI) using Microsoft Office Excel 2007 and Visual Basic software. Comparison between estimation using hierarchical regression model and flat regression model are discussed.

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